# Corey Staten

http://coreystaten.com/
corey.staten@gmail.com | (614) 259-8118

## EXPERIENCE

**REINFORCEMENT LEARNING GRANT** | from the Machine Intelligence Research Institute
July 2018 – September 2018

- Implemented and debugged reinforcement learning algorithms in TensorFlow, including: vanilla policy gradient, A2C, proximal policy optimization, and deep Q-networks + variants.
- Studied the reinforcement learning literature as part of an effort to get up to speed with the field, focusing on the most influential papers in deep RL from the last few years.

**GRADUATE STUDENT** | The Ohio State University
September 2014 – May 2018

- Described new algorithms for higher-dimensional path-finding in certain structures as part of a PhD thesis on higher-dimensional rewriting theory.
- Wrote and released a Python library implementing thesis algorithms, enabling computer-assisted exploration of these structures.
- Showed how to apply thesis algorithms to questions about diagram-filling in certain higher categories.

**CONSULTANT** | Self-employed
February 2013 – August 2014

- Designed and built a web platform(WEx) for peer review of writing assignments, used by thousands of students in multiple runs of a massive online course by the English department at Ohio State University.
- Provided project management, development, and support services to the WEx team in the English department, including: deployment, database management, integration with existing systems, and coordination with separate technology and accessibility teams at OSU.
- Helped design and build initial versions of Ximera, a web platform for interactive mathematics course materials.
- Worked with OSU's Office of Disability Services to increase features and accessibility of the AblePlayer media player.

**PROGRAMMER** | CallCopy
March 2011 – February 2013

- Researched and developed the core technical components for a new workforce management product, including call volume forecasting, simulation, and employee scheduling.
- Did full-stack development of web applications and telephony device integrations.

## EDUCATION

**THE OHIO STATE UNIVERSITY** | Ph.D. in Mathematics, August 2018
| M.S. in Mathematics, March 2011
| B.S. in Mathematics, June 2009

## SKILLS

**DOMAINS**
Full-stack Development
Reinforcement Learning
Mathematical Software

**KEY TECHNOLOGIES**
Python
JavaScript
TensorFlow